

## ABSTRACT OF THE DISCLOSURE

Deterioration of characteristics due to repeated cycles of coloration and discoloration in an electrochromic element comprising an oxidative coloration layer composed of a nickel oxide and a electrolyte composed of a solid electrolyte is suppressed. A lower ITO transparent electrode film 12 is formed on a transparent substrate 10. A nickel oxide film 32 making up an oxidative coloration layer, an intermediate layer 33, a tantalum oxide film making up a solid electrolyte layer, a mixed film comprising a tungsten oxide and a titanium oxide making up a reductive coloration layer, and an upper ITO transparent electrode film 20 making up an upper electrode film are formed on the lower ITO transparent electrode film 12 on this order.

15 The intermediate layer 33 is a transparent film comprising a metal oxide such as  $\text{SnO}_2$ , a metal such as Al, or a composite of the metal oxide and the metal.